

Section A Galen Street Bridge to North Beacon Street Bridge

The Charles River Reservation between the Galen Street Bridge and the North Beacon Street Bridge is well connected along the Basin, although many improvements can be made to better connect the neighborhoods in Watertown, Newton and Brighton to the Basin. The western extent of the Connectivity Study area is Watertown Square and the Galen Street Bridge.

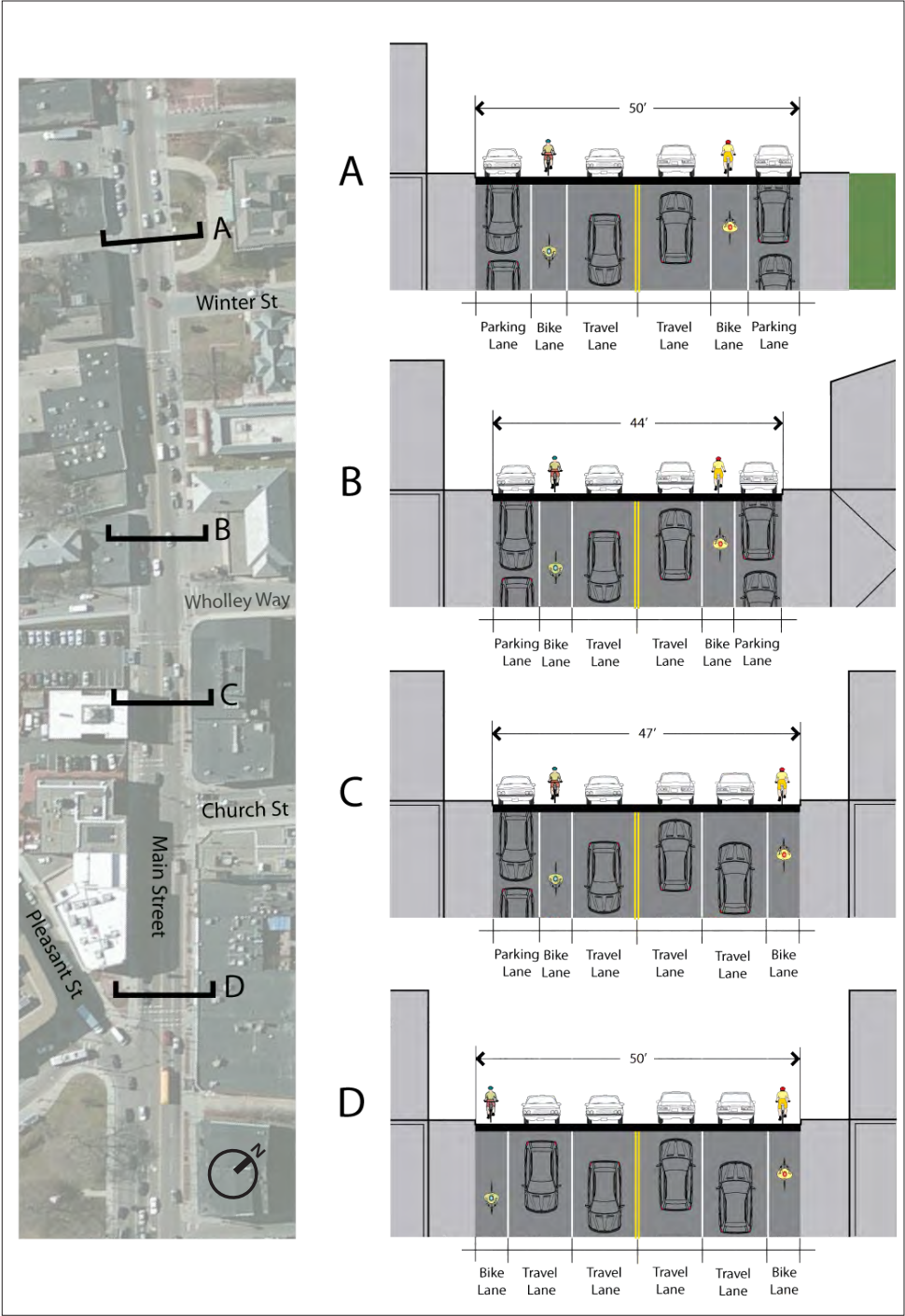
North Bank. On the north side of the river, the major corridors on which to focus bicycle and pedestrian connectivity improvements are Main Street, Mount Auburn Street, North Beacon Street, and Charles River Road. Though Main Street currently contains no facilities for bicyclists, re-striping the roadway with narrower travel lanes could provide enough space for standard-width bike lanes (see Figure 39).

The existing bike lanes on Charles River Road and on North Beacon Street both end before they reach the intersection at Watertown Square. Shared lane markings should be added to continue the facilities to the intersection.

The intersection of Galen and Mount Auburn Streets creates a difficult connection between the east and west sections of the Charles River Reservation and path system. This can be improved by widening the sidewalk on the west side of Mount Auburn Street which leads between the Mount Auburn Street crosswalk and the trailhead of the path system to the west. Although raised crosswalks may not be suitable here (due to the electric bus traffic), high-visibility crosswalks and signage can be added to delineate the path crossing for motorists. An upcoming curb realignment project, to be completed by the Watertown Department of Public Works, may be a good opportunity to implement some of these improvements.

High visibility crosswalks should be added to the crossings at Mount Auburn Street and Charles River Road to the Charles River Reservation. Because it is visible from Watertown Center, this location is a good place for a gateway to the reservation, which may include benches, wayfinding, interpretive signage or public art. DCR has recently made improvements to the nearby dock to make it ADA compliant.

The Watertown Riverfront Park Restoration Plan includes completed design documents, but is currently unfunded. This plan details improvements to the path system south of Charles River Road, between Watertown Square and the Watertown Yacht Club. Several new crossings across Charles River Road are planned, including on-street improvements that connect down Irving, Beechwood and Paul Streets. Although Beechwood Street may not be the preferred biking route due to topography, it may still serve as a valuable pedestrian connection from Charles River Road to North Beacon Street and Arsenal Street at signalized intersections. All on-road improvements should include 5- to 6-foot sidewalks, ADA-compliant curb ramps, bike lanes or shared use lanes, street trees, enhanced lighting, and wayfinding signage. The improvements on Irving Street will provide connection to Perkins School for the Blind, as well as to the proposed Watertown Community Path.



39. Cross sections of Main Street in Watertown Square show how bike lanes can be accommodated on a roadway of varying widths.

To create better connections between road crossings, the sidewalk on the north side of Charles River Road should be completed from the Perkins School eastward to North Beacon Street.

Improved crossings are needed where Charles River Road meets North Beacon Street north of the Watertown Yacht Club. This area is a pinch point for the path system, and the pavement should be widened to at least 10 feet.

At the north end of the North Beacon Street Bridge is an unsignalized intersection, four lanes wide, with a free right turn from the bridge onto Greenough Boulevard, making it a very difficult intersection for pedestrians and bicyclists to cross. The addition of a flashing signal or a refuge island will help assist this crossing. Other possible improvements include a bicycle jug handle to assist cyclists making the left turn from North Beacon Street onto Greenough Boulevard and a road narrowing to reduce the number of lanes on the bridge.

South Bank. On the south side of the Charles River, visibility to the path on the west side of the Galen Street Bridge needs to be improved. A high-visibility crosswalk should connect the two sides of the path across the south end of the Galen Street Bridge. The southwest corner of the bridge should be examined to see if a small turning radius or a curb extension can make the crossing distance shorter. Signal

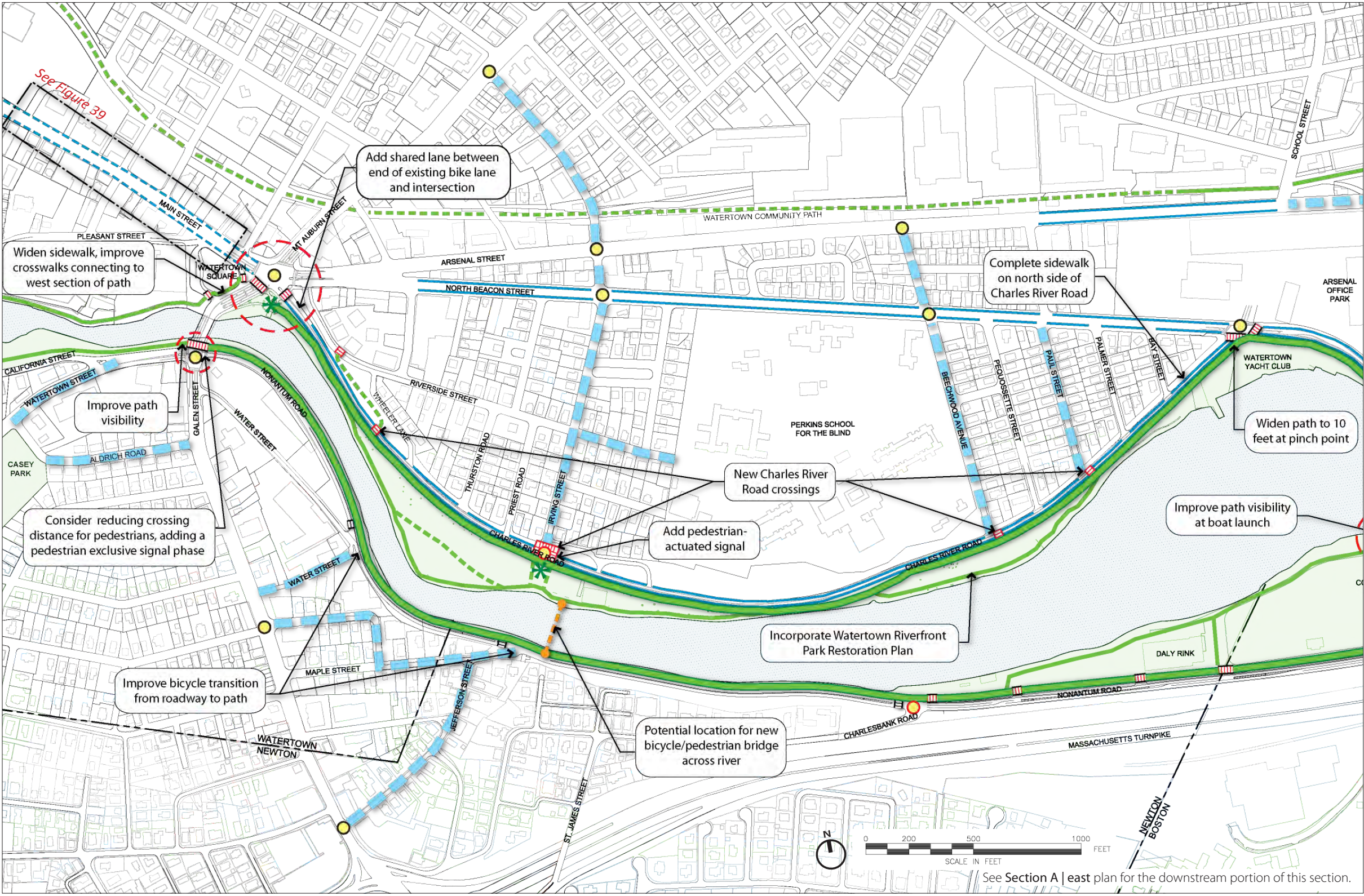
Figure 40

Recommendations

Section A | west
Galen Street Bridge to
North Beacon Street Bridge

Legend

- Existing crosswalk, no improvements needed
- Existing crosswalk, needs improvement
- Proposed crosswalk
- Existing/funded signal
- Proposed signal
- Existing ped bridge/overpass
- Proposed ped bridge/overpass
- Existing Hubway station
- Existing/funded bike lane/cycle track
- Proposed bike lane/cycle track
- Existing/funded multi-use path/sidewalk (primary)
- Existing/funded multi-use path/sidewalk (secondary)
- Proposed multi-use path
- New path/landscaping/reduced lanes
- Proposed bike/ped and street-scape improvements within ROW
- Reconfiguration of intersection recommended
- Entry node to the river with art, seating, lighting, landscape elements and small plaza features



Section A Galen Street Bridge to North Beacon Street Bridge continued

phasing should also be studied here to create an exclusive phase for pedestrians wishing to cross diagonally from the west side of the bridge to the bus depot on the southeast side of the intersection.

The connection to Casey Park, southwest of the Galen Street Bridge, should be improved via on-street improvements on Watertown Street and/or Aldrich Road.

Building on the recent improvements along Nonantum Road, new crossings can be added to the streets that connect Galen Street to the riverfront path system. These include Water Street, Jefferson Street and Hunt/Maple Street. A curb ramp should be added to the north side of Jefferson Street so that bicyclists may use the crosswalk on the west side of the Jefferson Street/Nonantum Road intersection.

In the 2002 Charles River Master Plan, a new trail bridge is recommended over the Charles River between the Galen Street Bridge and North Beacon Bridges. This new bridge would connect the Maple Street/Nonantum Road intersection in Newton with a heavily used playground area and basketball courts in Watertown. It would also provide the opportunity for walkers and bicyclists to do mini-loops between two existing bridges that are nearly a mile and a half apart.

Greater path visibility is needed near the boat launch just north of the Community Rowing Boathouse building to eliminate the conflict with people using the pathway.

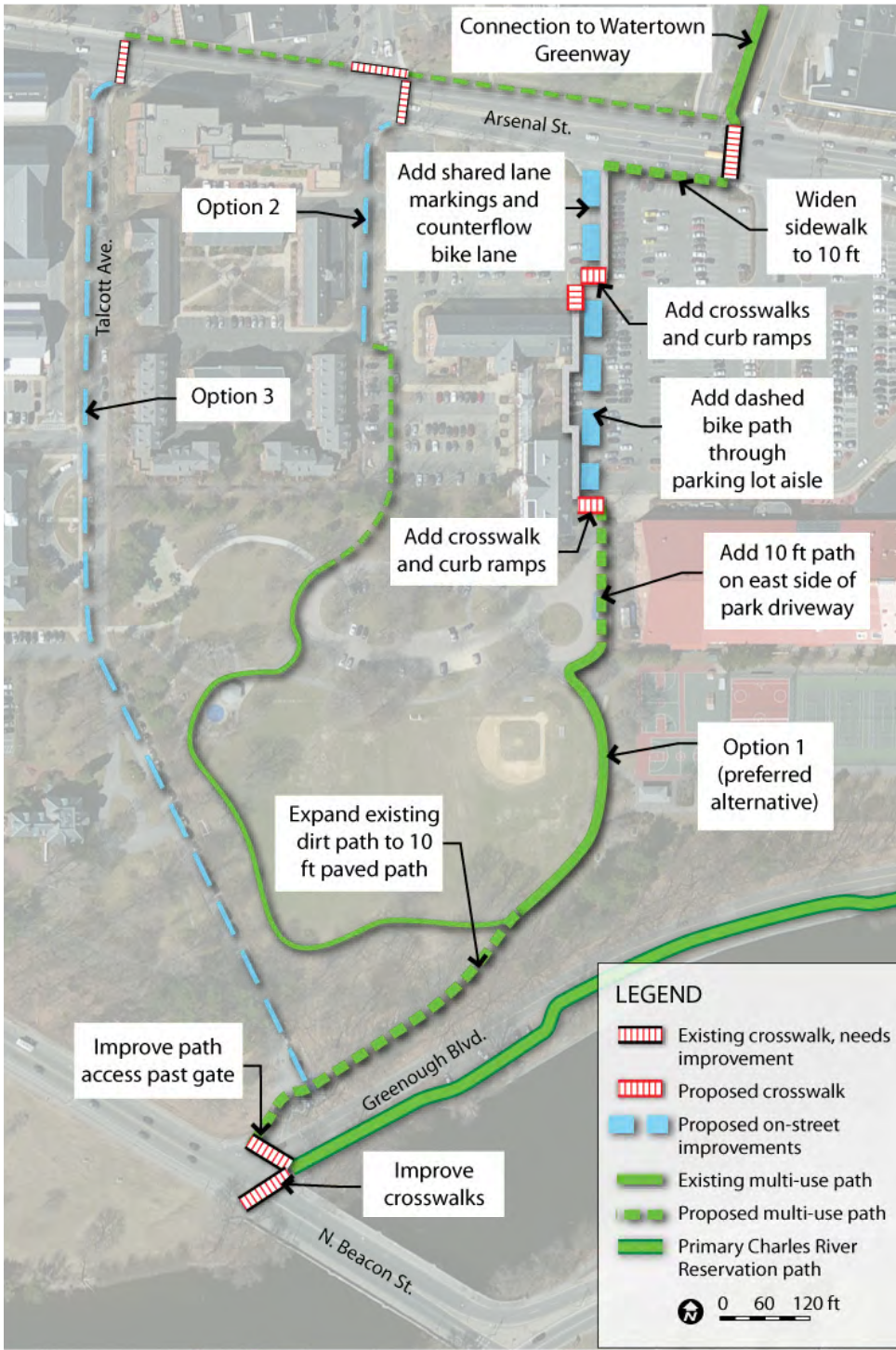
Brooks Street is one of a few streets that connect under the Massachusetts Turnpike to the Brighton neighborhood. On-street improvements to this roadway can enhance the connection to the path, facilitated by a traffic signal and crosswalk at Nonantum Road.

On the south end of the North Beacon Street Bridge, a new crossing is recommended between the bridge and the south side of Nonantum Road by the Brighton-Allston pool. This is a desire line for pedestrians, joggers and cyclists.

A connection is needed between the intersection of North Beacon Street and Greenough Boulevard and the Watertown Community Path to the north. The Watertown Community Path has regional connections to the Alewife Greenway in Cambridge, the Minuteman Bikeway and the Mystic River. There are several options for linking this path to the Charles River Reservation. The recommended route, Option 1, connects people from the Greenough Boulevard/North Beacon Street intersection through Arsenal Park and the Arsenal Mall parking lot (Figure 42). Much of this route runs through private property between DCR and the mall.



41. Existing and proposed view of the Arsenal Mall connection.



42. Proposed alternative connections from the Charles River to the Watertown Community Path through the Arsenal Mall and Arsenal Park.

Figure 43

Recommendations

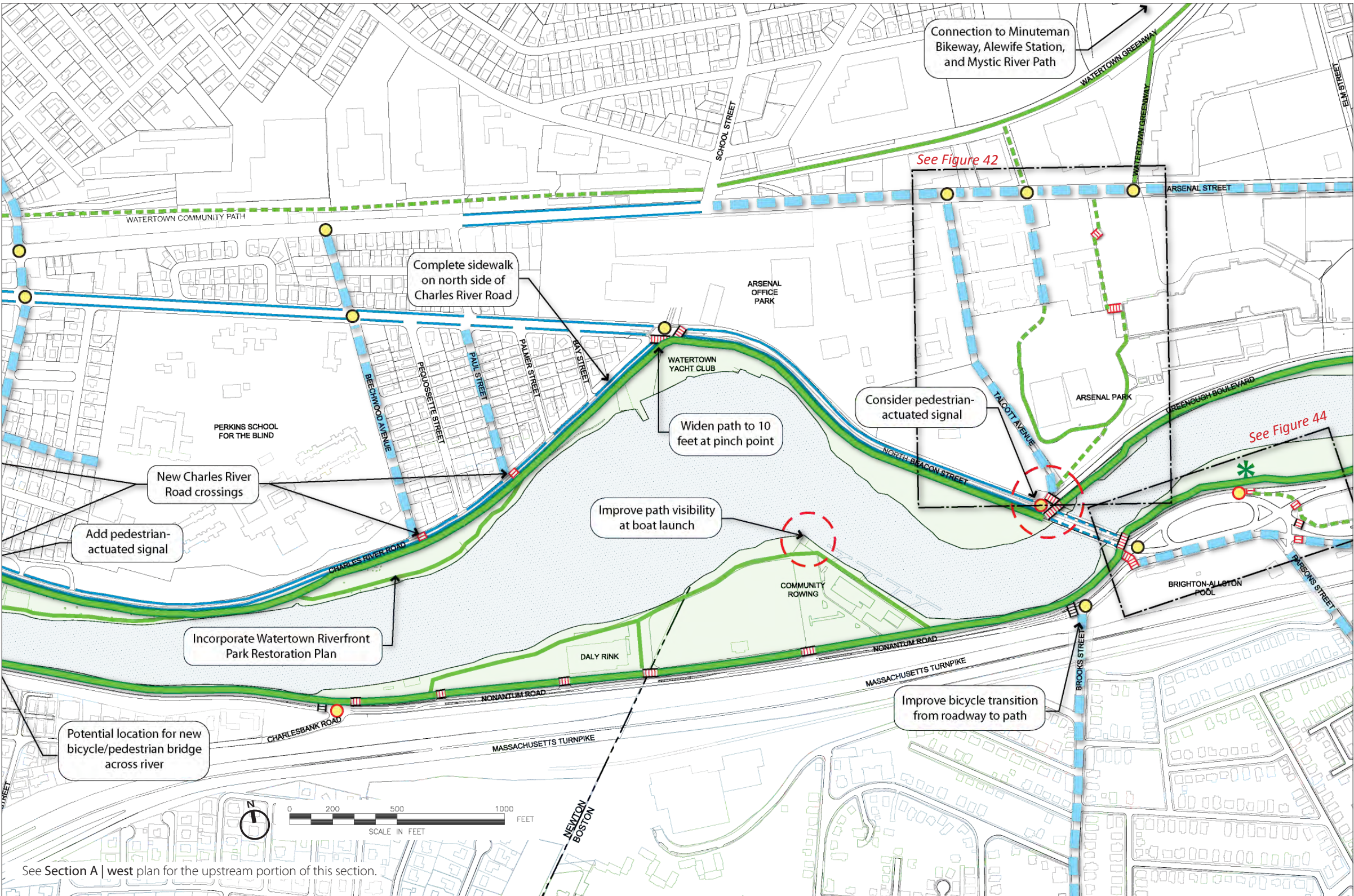
Section A | east

Galen Street Bridge to

North Beacon Street Bridge

Legend

- Existing crosswalk, no improvements needed
- Existing crosswalk, needs improvement
- Proposed crosswalk
- Existing/funded signal
- Proposed signal
- Existing ped bridge/overpass
- Proposed ped bridge/overpass
- Existing Hubway station
- Existing/funded bike lane/cycle track
- Proposed bike lane/cycle track
- Existing/funded multi-use path/sidewalk (primary)
- Existing/funded multi-use path/sidewalk (secondary)
- Proposed multi-use path
- New path/landscaping/reduced lanes
- Proposed bike/ped and street-scape improvements within ROW
- Reconfiguration of intersection recommended
- Entry node to the river with art, seating, lighting, landscape elements and small plaza features



Section B North Beacon Street Bridge to Arsenal Street Bridge

The reservation between the North Beacon Street Bridge and the Arsenal Street Bridge needs connectivity improvements, primarily at the bridge intersections on the north and south sides.

North Bank. Improvements along Arsenal Street will improve access to the reservation at the Arsenal Street Bridge. On-street enhancements should be considered along Arsenal Street between the existing bike lanes at the School Street intersection and the Arsenal Bridge. The sidewalk on the north side should be widened to provide a pedestrian connection to Greenough Boulevard, particularly on the block between Coolidge Avenue and Greenough Boulevard.

Crossings at the intersection on the north side of the Arsenal Street Bridge should be improved with high-visibility crosswalks.

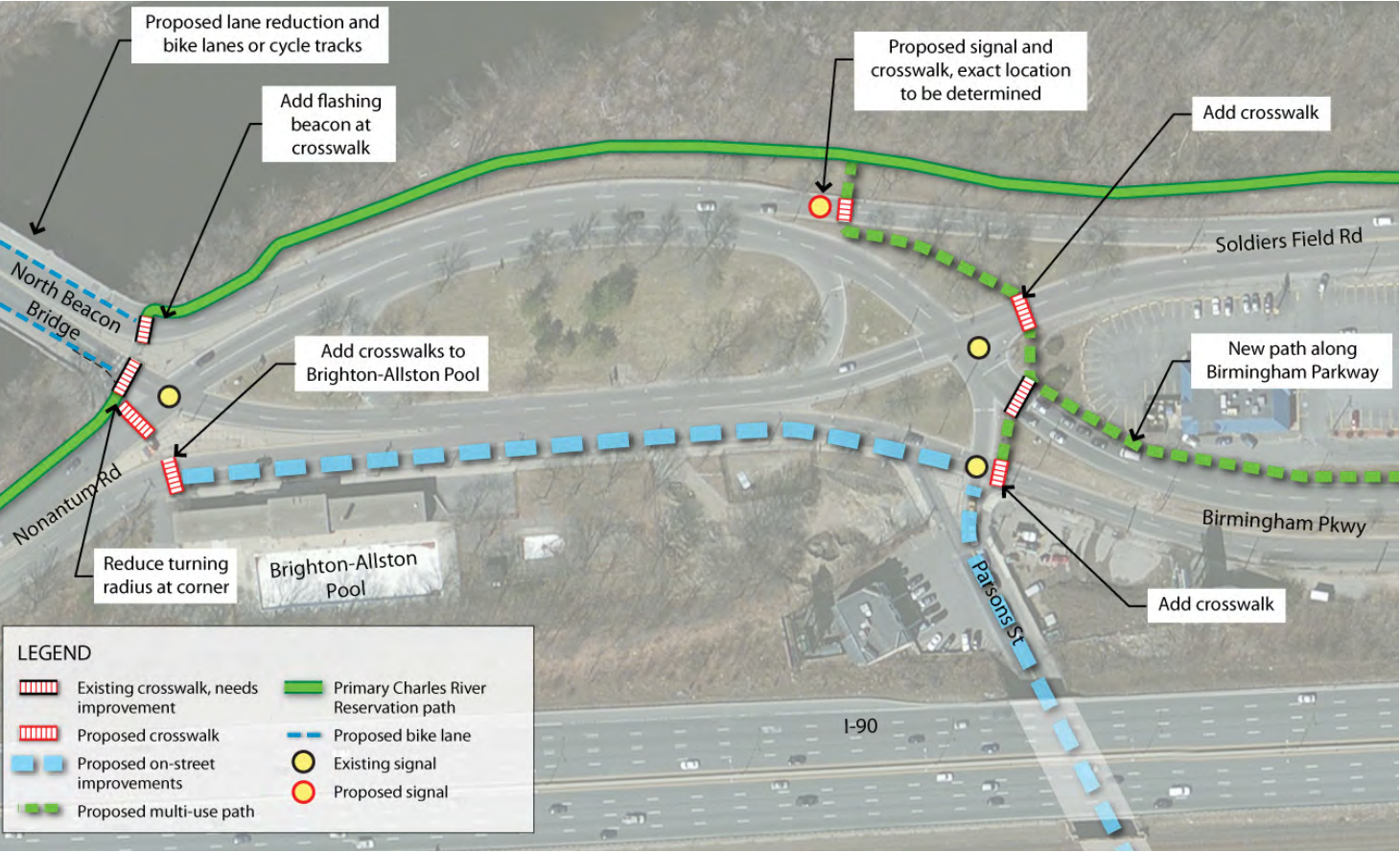
South Bank. On the south side of the Charles River, the rotary intersection south of the North Beacon Street Bridge is a very difficult intersection for pedestrians and bicyclists to navigate. Long-term study is needed to determine if a reconfiguration of this intersection can improve bicycle and pedestrian connectivity, as well as motor vehicle flow.

There are short-term improvements that can be made to the existing rotary. Parsons Street, like Brooks Street, provides a connection under the Massachusetts Turnpike to the Brighton neighborhood. On-street improvements, such as widened sidewalks and bicycle facilities, should be made to Parsons Street in addition to new crossings that connect Parsons Street to the reservation. The addition of crosswalks across Leo Birmingham Parkway and Soldiers Field Road will make this desire line a safe crossing. A study of the Soldiers Field Road crossing is needed to determine if a pedestrian-actuated signal is appropriate. A flashing beacon is recommended on the Boston-side of the North Beacon Street bridge to warn motorists turning right onto the bridge of the path crossing there. Bike lanes are recommended for Parsons Street and North Beacon Street in the Boston Bicycle Master Plan, still in progress.

The North Beacon Street Bridge should be reconfigured from four to three lanes to provide space for a cycle track across the river. This will improve bike connections from Watertown to the Nonantum Road path and help cyclists heading into Watertown to avoid the right-turn lane from the bridge onto Greenough Boulevard.

Soldiers Field Road and Leo Birmingham Parkway are parallel roadways. Further study is needed to determine if the Birmingham Parkway is a candidate for road narrowing. The section of the Parkway between Parsons Street and North Beacon Street may be needed for queuing at the rotary. The addition of a path or a wide sidewalk on the north side of the roadway is recommended. Crosswalks should be added to the signalized intersection at North Beacon Street and Birmingham Parkway. From this intersection eastward to the Lincoln Street intersection, Birmingham Parkway can likely be narrowed from four lanes to two lanes, providing ample space for a separated shared-use path and additional parkland. At the Lincoln Street intersection, new crosswalks should be added to connect across the Parkway.

Further on-street improvements can be made to the Market Street/Birmingham Parkway corridor to enhance the connection from Brighton Center to the river. The intersection of Western Avenue and Birmingham Parkway can be improved with the addition of new, high-visibility crosswalks connecting to the reservation. Birmingham Parkway should be considered for a lane reduction here. Narrowing from four to three northbound lanes would allow for a curb extension to facilitate the pedestrian crossing.



44. Bicycle and pedestrian improvements at the North Beacon Street Bridge/Soldiers Field Road/Parsons Street/Birmingham Parkway rotary



45. Soldiers Field Road near the proposed new crossing to the reservation

Figure 46

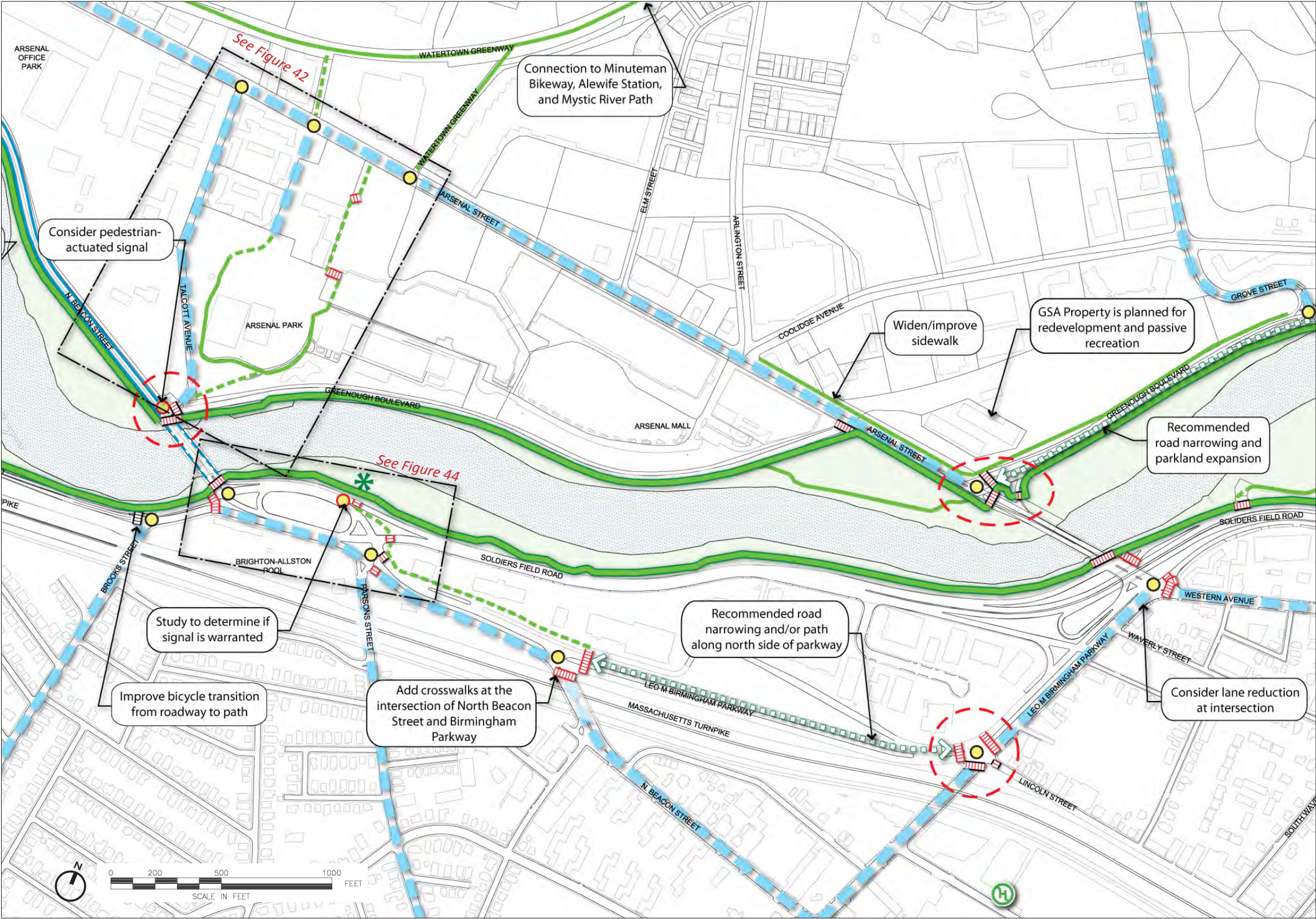
Recommendations

Section B

North Beacon Street Bridge to Arsenal Street Bridge

Legend

- Existing crosswalk, no improvements needed
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- Existing/funded signal
- Proposed signal
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- Proposed ped bridge/overpass
- Existing Hubway station
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Section C Arsenal Street Bridge to Eliot Bridge

The Charles River Reservation between the Arsenal Street and Eliot Bridges is relatively narrow on the north side, but widens to include Herter Park on the south side. This great riverfront park is difficult to reach from nearby neighborhoods. The concept of the “Herter Loop” includes increasing the parkland between these two bridges, while also improving the neighborhood connections to the loop.

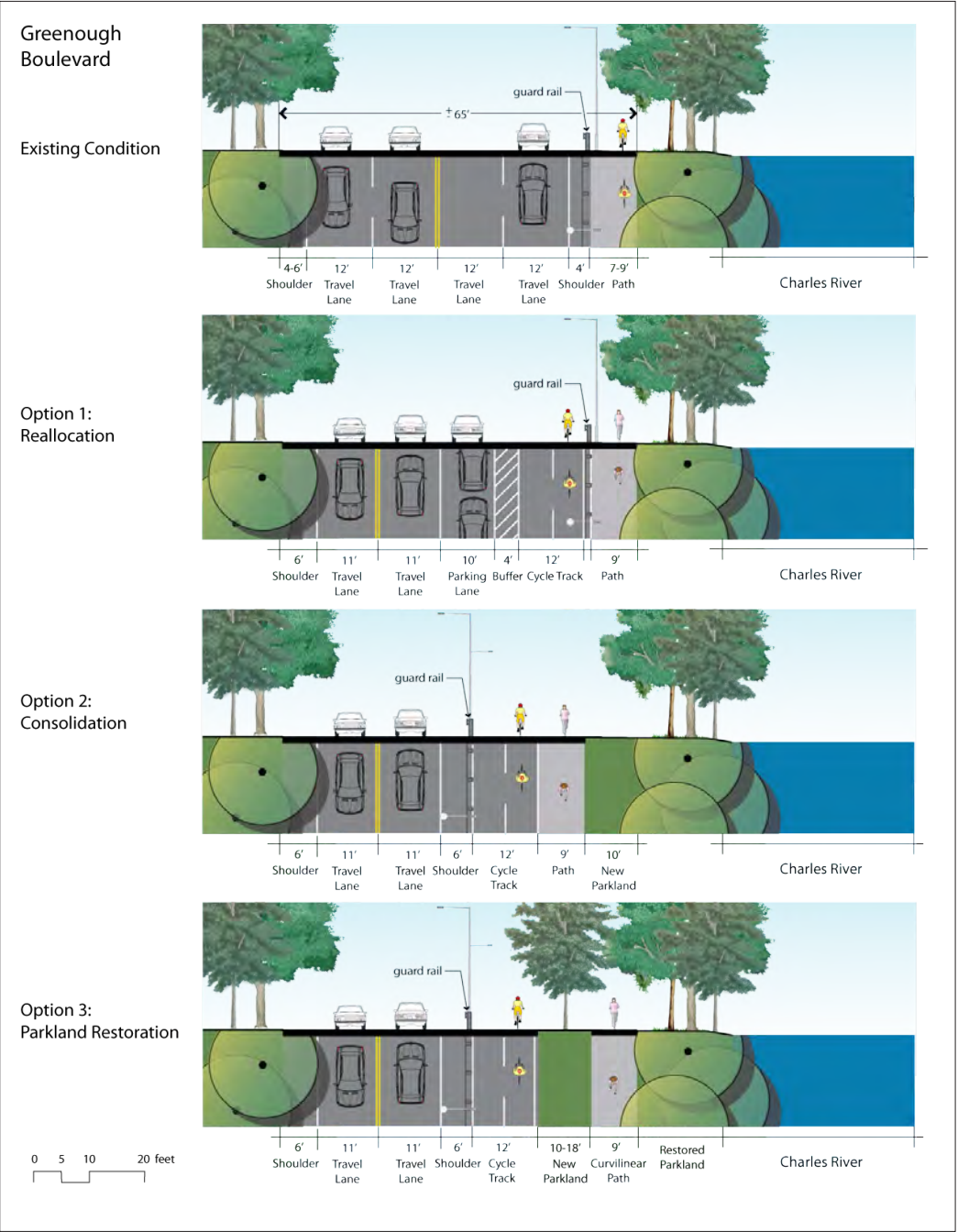
North Bank. On the north side of the river, the GSA property at the northeast corner of Arsenal Street and Greenough Boulevard will be redeveloped by DCR for passive recreation, and the connection across Greenough Boulevard to the reservation should be improved.

Greenough Boulevard is a candidate for road narrowing, and further study will be needed to determine the final design of this roadway. It is recommended that (for at least a portion of the roadway between Arsenal Street and the Eliot Bridge) its width be reduced

from four lanes to two. The existing parkland along this stretch is very narrow, and eliminating the two lanes on the south side of Greenough Boulevard would expand the park land and give more space to the bicyclists and pedestrians who use it.



47. Existing and proposed view of Greenough Boulevard, Option 2. Image credit: David Curran, Lawrence and Lillian Solomon Foundation.



48. Cross-sectional views of the Greenough Boulevard design options [Refer to Figure 50 for the location of this cross-section].

There are several options for the road narrowing on Greenough Boulevard (Figure 47). Option 1 reallocates the existing pavement so that a 12-foot wide two-way cycle track and parking can be added. Option 2 consolidates the existing roadway and path, maximizing the width of the continuous parkland on the south side of the path. Option 3 is similar to option 2, but instead of abutting the roadway, the path through the parkland is curvilinear.

The intersection at the Cambridge end of the Eliot Bridge is extremely difficult for pedestrians and bicyclists to navigate. Simplifying the lanes and crossings for this intersection should be considered. Of particular importance is maintaining a safe crossing from the Buckingham Browne & Nichols School to the reservation. Figure 48 shows a conceptual design for reducing lanes and increasing parkland near the Eliot Bridge.



49. The west end of Eliot Bridge showing the reallocation of the inbound half of Greenough Boulevard for pedestrian and bicycle use and two-way traffic on the current outbound half of the pavement. Image courtesy of the Lawrence and Lillian Solomon Foundation.